

WHAT IS CLAIMED IS:

1. A chip light emitting diode comprising:
a metal pad and a lead spaced away from each other on a printed circuit board;
5 a light emitting chip mounted on the metal pad;
a wire connecting the light emitting chip and the lead; and
a resin package sealing the light emitting chip and at least a part of the metal pad, lead, and
the wire, the resin package having at least one curved projecting part.

10 2. A chip light emitting diode as recited in claim 1, wherein the curved projecting part has a
cross section which is substantially semicircular, or substantially or partially elliptical or parabolic.

3. A chip light emitting diode as recited in claim 1, wherein the curved projecting part has a
cross section which is comprised of a plurality of straight lines with an angle formed between
15 adjacent lines.

4. A chip light emitting diode as recited in claim 1, wherein at least one stepped part is
formed at an outer edge of the resin package.

20 5. A chip light emitting diode as recited in claim 1, wherein the surface of the resin package
has fine striations to scattering light emitted from the light emitting chip.

6. A chip light emitting diode as recited in claim 1, wherein the resin package has one
projecting part.

25 7. A chip light emitting diode as recited in claim 1, wherein the resin package has two
projecting parts which are spaced away from each other by a predetermined interval,
wherein the predetermined interval ranges from 0.1 to 0.4 times a bottom length of the resin
package

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8. A fabrication method of a chip light emitting diode, comprising the steps of:
mounting a light emitting chip on a metal pad formed on a printed circuit board;
connecting the light emitting chip to a lead formed on the printed circuit board;
providing the printed circuit board within a mold having a cavity, the cavity corresponding
5 to at least one projecting part of the chip light emitting diode; and
forming a resin package sealing the light emitting chip and at least a part of the metal pad
and lead by injecting resin material into the cavity of the mold, the resin package having at least one
curved projecting part.